

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Chesapeake Rigging Ltd

Maryland Technology Extension Service

Chesapeake Rigging Uses Erp To Improve Material Management

Client Profile:

Chesapeake Rigging, located in Annapolis, Maryland, is a designer, fabricator, and installer of sailboat rigging and spars. A smaller but growing component of the business is design and fabrication of architectural metalwork and accessories. Core products and services are marketed and sold primarily to private boat owners that sail or port in the Chesapeake Bay region. The company currently employs approximately 16 people and is planning to expand its manufacturing capabilities to support growth of the spar building and architectural fabrication businesses.

Situation:

In recent years, Chesapeake Rigging has enjoyed modest growth while experiencing a growing strain on profitability. Sales are highly seasonal and concentrated, creating a strong requirement for aggressive cost management to ensure increasing productive use of the skilled technician workforce and effective allocation of material assets. The company's management systems consist of an outdated financial/inventory software application and manual, paper-based estimating and work order processes. These systems are not integrated and fall considerably short of the capabilities necessary to effectively move to a higher level of cost and process management. Data management and information processing require inordinate amounts of labor. Timely, accurate reports of inventory, job status, job costs, and other essential performance data are not available.

A failed enterprise resource planning (ERP) software selection/implementation in early 2001 delayed replacement of legacy software and highlighted the need to define business processes and policies before repeating an ERP system selection. The cost of software and implementation had now taken on increased importance as a system selection criterion. A decision on a software system solution had to be made by October 1, 2001 to allow time for Chesapeake Rigging to implement it and train personnel in its use before the busy spring season arrived. The company contacted the Maryland Technology Extension Service (MTES), a NIST MEP network affiliate, for assistance.

Solution:

MTES conducted the project in two phases. In the first phase, MTES worked with Chesapeake Rigging to create a flow-chart of business processes from the point of job estimate through job completion, identifying all activities with

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significant impact on job cost and internal efficiencies. MTES's activity analysis showed few formal process controls and procedures being used. It also revealed that the maximum business performance benefit would result from quotation completeness, material data access, labor task detail, and accurate job cost recording. These aspects of the current manual process would have to be strengthened and the replacement system would have to solidly support these process activities. MTES also identified improvements to the quotation/work order, material control, and inventory management processes. With MTES's help, Chesapeake Rigging began building a consolidated parts inventory spreadsheet, accessible to all personnel. Improvement projects served as clear guidance and critical factors for evaluating the next business management software candidates.

In the second phase, MTES screened software systems to select one based on current business process improvements, budget constraints, and future manufacturing functionality needs. MTES identified four integrated software packages for Chesapeake Rigging to evaluate. Relative strengths of the systems varied, though each was judged appropriate. MTES had vendors and resellers conduct screening demonstrations and Chesapeake Rigging chose one based on all its criteria. MTES worked with the software vendor to schedule detailed demonstrations employing actual customer data. The preferred system choice was confirmed following two customer demonstrations and the development of system procedure adaptations that manage individual jobs and their material and labor components. The software was installed in early October 2001.

Results:

Saved an estimated \$25,000 in software costs.

Saved an additional \$7,000 through the Maryland Department of Business and Economic Development's matching grant.

Selected and implemented an ERP software system.

Gained a clearer understanding of the integrated nature of the business process.

Increased focus on business improvement and the need to set performance goals.

Increased the manufacturing base.

Developed a consolidated (vendor and company) parts inventory database.

Anticipating improvements in operational performance.

Testimonial:

"[The Maryland Technology Extension Service] has been an enormous help in the entire process. We would have had a much more difficult time in the entire process without [its] commitment and attention to detail."

Thomas Wohlgemuth, President